
REMARKS

Claims 1-5 are presently pending in the application. Upon entry of this Response, Claim 1 will be pending. Entry of this Response and reconsideration and allowance of amended Claim 1 in view of the present comments are respectfully requested.

As a preliminary matter, Claim 1 is amended herein to specifically recite the three perovskite structures recited in Examples 1-3 of the specification (*see e.g.*, page 18, line 10 – page 21, line 13 of the specification). Therefore, no new matter is added by this amendment. Further, no new issues are raised by this amendment, as the three recited structures in amended Claim 1 were within the previously recited genus.

The amendment to Claim 1 does not constitute an admission with respect to any rejection, but is being made solely to advance prosecution with respect to certain clearly patentable subject matter. Applicants reserve the right to pursue the canceled subject matter in a continuation application.

Claim rejections under 35 U.S.C. §102(e)

Claims 1-5 are rejected under 35 U.S.C. §102(e) as allegedly being anticipated by Kaneko et al., “hereinafter Kaneko,” (US Patent 6,800,388 B2). Applicants respectfully traverse this rejection and request the withdrawal thereof, because Kaneko does not anticipate amended Claim 1 for at least the reasons set forth herein and in the February 27, 2006 Amendment (which is incorporated herein by reference).

In particular, Kaneko does not teach or suggest an exhaust gas purifying catalyst comprising a composite oxide having any of the three perovskite structures recited in amended Claim 1.

Kaneko does not teach a species within amended Claim 1. The Examiner appears to be relying on the genus of Kaneko, rather than on any species for the anticipation rejection. In particular, the Action indicates that “[i]t is considered the disclosed catalyst composition [of Kaneko has] the same perovskite structure as being claimed since the metals are the same or the claimed metals are falling within the disclosed list of metals.” Action at p. 4. The Action relies on *In re Schaumann*, 572 F.2d 312, 197 USPQ 5 (CCPA 1978), to support the position that a claim may be anticipated “when the reference teaches a small genus which places a claimed species in the possession of the public and the species would have been obvious even if the genus were not sufficiently small to justify a rejection under 35 USC 102.” *Id.* Applicants submit however, that reliance on *Schaumann* is misplaced here, because contrary to the present situation, in *Schaumann*, the reference taught a generic formula embracing a **limited** number of compounds closely related to each other in structure **and the properties possessed by the compound class of the prior art was that disclosed for the claimed compound.** In the relied upon embodiment of *Schaumann* (*i.e.*, that of claim 1), the embodiment was limited within the genus to a structure with only one variable substituent, R, which was limited to low alkyl radicals, and had only 7 compounds. Based on this one variable substituent, the Court found that one of ordinary skill in the art would at once envisage the subject matter within claim 1 of the reference.

In contrast to *Schaumann*, here the number of compounds disclosed by Kaneko is not limited to 7, but is at least in the hundreds, particularly considering the numerous combinations of elements. In Kaneko at least four components (A', A'', B', and B'') are all variable, and each of those positions may include more than one element (*see e.g.* col. 2 lines 18-24 of Kaneko).

Additionally, the properties possessed by the compound class of Kaneko are different than those of the presently claimed catalyst. In particular, the presently claimed catalyst must have Pt to effectively remove CO from exhaust gas. To achieve a stable Pt over a long period of time the present inventors discovered the importance of having a rare-earth metal that can only have a valence of 3. Additionally, the other large cations of the perovskite structure must be a small valence metal ion, which is selected from alkaline earth metals and Ag which always have valences of 2 or less in such an oxide structure. The importance of and combination of these features to achieve the desired long active exhaust gas purification catalyst is not taught or suggested by Kaneko. In fact, Kaneko is directed to a different purpose of achieving a fuel cell catalyst to generate H₂.

"It is well established that the disclosure of a genus in the prior art is not necessarily a disclosure of every species that is a member of that genus." *Atofina v. Great Lakes Chemical Corporation*, No. 05-1359 at 13 (Fed. Cir. March 23, 2006), citing, *In re Baird*, 16 F.3d. 380, 382 (Fed. Cir. 1994). There may be many species encompassed within a genus that are not disclosed by a mere disclosure of the genus. *Atofina*, at 13. The huge genus of Kaneko cannot be said to be a disclosure of each of the numerous species therein. Each of the four components of Kaneko may be **one or more** elements. Thus, for each component numerous

different possible combinations of elements may be present. For example, because A' may be La and/or Ce, there are three possible components of A'. B' has 15 possible combinations for the four possible components, where the number of possible combinations grows factorially with each additional element, making the overall genus likely to encompass at least 1000 different combinations of elements without any teaching in the direction of the present invention.

Because Kaneko does not teach a species within the scope of the amended Claim 1, and because the genus of Kaneko does not teach or suggest any of the species of amended Claim 1, Applicants respectfully submit that Claim 1 is not anticipated by Kaneko.

Furthermore, Kaneko does not render Claim 1 obvious. There is no teaching or suggestion in Kaneko of the species of amended Claim 1 and there is no motivation in Kaneko for one to pick and choose particular elements to achieve the purpose of the present invention (which is not the objective of Kaneko). By way of non-limiting example, amended Claim 1 recites platinum in an atomic ratio of 0.10 or 0.08. Kaneko only includes one example of a composition that includes platinum at all (Example 17), but in that example, the platinum is present in a ratio of 0.8 (*i.e.*, well above the presently claimed ratio). Furthermore, Example 17 of Kaneko does not include an alkaline earth metal or Ag at the A' position (*i.e.*, the A'' position of Kaneko). Accordingly, Kaneko does not render obvious amended Claim 1.

For at least these reasons, withdrawal of this rejection is believed to be appropriate and is respectfully requested.

Claim rejections under 35 U.S.C. §102(b)

Claims 1-5 are rejected under 35 U.S.C. §102(b) as allegedly being anticipated by Monceaux et al., hereinafter "Monceaux," (US Patent 5,622,680). Applicants respectfully traverse this rejection and request the withdrawal thereof, because Monceaux does not anticipate amended Claim 1, for at least the reasons set forth herein and in the February 27, 2006 Amendment.

In particular, similarly to Kaneko, Monceaux does not teach or suggest an exhaust gas purifying catalyst comprising a composite oxide having any of the three perovskite structures recited in amended Claim 1.

Monceaux does not teach a species within Claim 1. With respect to the Monceaux genus, this genus encompasses even more species than Kaneko, thus, for at least the reasons indicated above with respect to Kaneko, Monceaux does not anticipate Claim 1. In particular, the structure of Monceaux has the formula $L_x L'_{1-x} M_y M'_z \Phi_{1-y-z} O_3$, wherein L is an element selected from the lanthanides and the rare earth metals, L' is an element selected from Sr, Ca, Ba, Ce, K, Bi, Rb and Na, M is a transition metal selected from Cr, Mn, Fe, Co, Ni and Cu, M' is at least one metal selected from Pt, Ru, Pd, Rh, etc. (see col. 1, lines 40-57). The L component alone can be any of 44 elements, L' is any of 8 elements, M is any of 6 elements and M' is one or more of four elements (*i.e.*, 15 possible combinations of elements). Thus, this genus appears to include thousands of possible species.

Because Monceaux does not teach a species within the scope of amended Claim 1, and the genus of Monceaux does not teach a species within amended Claim 1, the claim is not anticipated by Monceaux.

Furthermore, Monceaux does not render the Claim 1 obvious. There is no teaching or suggestion in Monceaux of the claimed species and there is no motivation in Monceaux for one to pick and choose particular elements to achieve the purpose of the present invention (which is not the objective of Monceaux). Monceaux is directed to solving a different problem, *i.e.*, minimizing the amount of noble metals in the complex. Accordingly, one would not be motivated by Monceaux to modify its teachings to achieve the goals of the present invention, such as to stabilize Pt in the catalyst. Accordingly, for at least this reason, Monceaux does not render amended Claim 1 obvious.

Withdrawal of this rejection is believed to be appropriate and is respectfully requested.


If the Examiner believes that there is any issue which could be resolved by a telephone or personal interview, the Examiner is respectfully requested to contact the undersigned attorney at the telephone number listed below.

Response Under 37 C.F.R. §1.116
U.S. Patent Application No. 10/520,824

Attorney Docket No. 71465.0008
Customer No. 57362

Applicants hereby petition for any extension of time which may be required to maintain the pendency of this case, and any required fee for such an extension is to be charged to Deposit Account No. 50-0951.

Respectfully submitted,



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